

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division**

DIRECTPACKET RESEARCH, INC.,
909 Lake Carolyn Parkway
Suite 1800
Irving, Texas 75039,

Plaintiff,

v.

POLYCOM, INC.,
13650 Dulles Technology Drive
Herndon, Virginia 20171,

Defendant.

Civil Action No. 2:18cv331

JURY TRIAL DEMANDED

COMPLAINT

directPacket Research, Inc. (“directPacket”), through its counsel, brings this Complaint against Polycom, Inc. (“Polycom”) for the infringement of U.S. Patent Nos. 7,773,588; 7,710,978; and 8,560,828 (together, the “Patents-in-Suit”) and alleges as follows.

THE PARTIES

1. Plaintiff directPacket is a corporation organized under the laws of the State of Texas with its principal place of business located at 909 Lake Carolyn Parkway, Suite 1800, Irving, Texas 75039. directPacket is a privately owned company that researches, develops and sells videoconferencing products.

2. Upon information and belief, Defendant Polycom is a corporation organized under the laws of the State of Delaware having a regular and established place of business at 13650 Dulles Technology Drive, Herndon, Virginia 20171, which is within the Alexandria Division of this District.

JURISDICTION AND VENUE

3. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

4. Polycom is subject to personal jurisdiction in this District because, upon information and belief, Polycom has engaged in systematic and continuous business activities in this District. Specifically, Polycom maintains a regular and established place of business in the Commonwealth of Virginia and within the Alexandria Division of this District. Moreover, as described below, Polycom has committed acts of infringement giving rise to this action within this District.

5. Polycom maintains a regular and established place of business in the Alexandria Division of this District located at 13650 Dulles Technology Drive, Herndon, Virginia 20171 (the “Polycom Herndon Center”). Upon information and belief, the Polycom Herndon Center houses at least 100 employees. One of Polycom’s four Executive Experience Centers (“EECs”) in the United States is also located at the Polycom Herndon Center. Upon information and belief, Polycom’s EECs allow potential customers to experience Polycom videoconferencing products customized for the customer’s industry and specific business needs, as well as to talk to Polycom executives and technical experts about Polycom videoconferencing products.

6. Upon information and belief, Polycom regularly conducts substantial business within the Commonwealth of Virginia, including committing acts of infringement in the Alexandria Division of this District. As explained in greater detail below, Polycom directly and indirectly infringes at least one or more of the claims of each of the Patents-in-Suit through its sale, offer for sale and/or use of its videoconferencing products in this District.

7. Polycom has committed, and continues to commit, acts of direct infringement in the Alexandria Division of this District when it uses its own videoconferencing products at the Polycom Herndon Center's EEC in a manner that infringes at least one or more of the claims of each of the Patents-in-Suit. For example, Polycom demonstrates its RealPresence Immersive Studio, a product managed using the Polycom RealPresence Platform, at the Polycom Herndon Center's EEC. Upon information and belief, Polycom also commits acts of direct infringement in the Alexandria Division of this District when it installs and tests its products for its customers located in the Alexandria Division of this District, such as the government of the United States, including but not limited to the U.S. Department of Defense.

8. Polycom has also committed, and continues to commit, acts of indirect infringement in the Alexandria Division of this District by inducing its customers and resellers to infringe at least one or more of the claims of each of the Patents-in-Suit. For example, Polycom sold its videoconferencing products to the Virginia Department of Judicial Information Technology for use in 325 courts and 125 magistrate offices in the Commonwealth of Virginia, including in the Alexandria Division of this District. Upon information and belief, Polycom also currently offers its videoconferencing products for sale in this District through one or more authorized resellers located in the Alexandria Division of this District, including Virtual Systems Group, Inc., located in Mclean, Virginia; Carousel Industries of North America, located in Reston,

Virginia; Shi International Corp., located in Reston, Virginia; Vonage Business, Inc., located in Herndon, Virginia; Insight Direct USA, located in Chantilly, Virginia; CDW (USA), located in Herndon, Virginia; AVI-SPL, located in Sterling, Virginia; and Iron Bow Technologies, located in Chantilly, Virginia.

9. Polycom has also committed, and continues to commit, acts of indirect infringement in the Alexandria Division of this District by selling and offering to sell its videoconferencing products for use in practicing at least one or more of the claims of each of the Patents-in-Suit, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such one or more claims, and not a staple article or commodity of commerce suitable for substantial noninfringing use.

10. Accordingly, this Court has personal jurisdiction over Polycom due to its continuous and systematic contacts with the Commonwealth of Virginia, including the commission of patent infringement within the Commonwealth and within the Alexandria Division of this District.

11. Venue is proper in the Alexandria Division of this District pursuant to 28 U.S.C. § 1391(b)(2), 28 U.S.C. § 1400(b), and Local Civil Rule 3(C) because Polycom has a regular and established place of business located at 13650 Dulles Technology Drive, Herndon, Virginia 20171, within the Alexandria Division of this District, and commits acts of infringement in the Alexandria Division of this District.

FACTUAL BACKGROUND

The Patents-in-Suit

12. U.S. Patent No. 7,773,588 (the “’588 Patent”), entitled “System and Method for Cross Protocol Communication,” was duly and legally issued on August 10, 2010, by the United States Patent and Trademark Office. directPacket owns the ’588 Patent. A true and correct copy of the ’588 Patent is appended hereto as Exhibit A and incorporated herein by reference.

13. U.S. Patent No. 7,710,978 (the “’978 Patent”), entitled “System and Method for Traversing a Firewall with Multimedia Communication,” was duly and legally issued on May 4, 2010, by the United States Patent and Trademark Office. directPacket owns the ’978 Patent. A true and correct copy of the ’978 Patent is appended hereto as Exhibit B and incorporated herein by reference.

14. U.S. Patent No. 8,560,828 (the “’828 Patent”), entitled “System and Method for a Communication System,” was duly and legally issued on October 15, 2013, by the United States Patent and Trademark Office. directPacket owns the ’828 Patent. A true and correct copy of the ’828 Patent is appended hereto as Exhibit C and incorporated herein by reference.

15. The Patents-in-Suit are directed toward systems, methods, and articles of manufacture that facilitate multimedia communication across computer networks, in support of applications such as videoconferencing, Internet telephony, and virtual collaboration. These multimedia communication sessions typically involve the real-time exchange of multimedia communication data (*e.g.*, audio, video, and control data) between two or more endpoint devices (*e.g.*, an Internet telephone handset, a videoconferencing unit, or a digital whiteboard). In order to facilitate these communication sessions and ensure compatibility between different endpoint

devices, network protocols were developed that standardized the manner in which endpoint devices communicate with one another. These protocols, for instance, define the procedures used to establish a communication session between two endpoint devices (*e.g.*, the format and sequence of messages to be exchanged) and the manner in which multimedia data is communicated between these two endpoints (*e.g.*, the format of an audio or video data stream). These protocols may further specify that messages within the protocol conform to a particular format (text based, binary, *etc.*). Two prominent examples of such protocols are: (1) the H.323 suite of protocols (collectively referred to as “H.323”), which was developed by the International Telecommunication Union-Telecommunication Standardization Sector (“ITU-T”) and first defined in Recommendation ITU-T H.323 in November 1996; and (2) the Session Initiation Protocol (“SIP”), which was developed by the Internet Engineering Task Force (“IETF”) and first defined in RFC2543 in March 1999. Both H.323 and SIP assist with multimedia communication sessions over computer networks.

16. In computer networks, data generated by an application is segmented into relatively small units and formed into packets, which are individually routed over the network based on information contained within each packet. Packets include a header which contains address and control information, and a payload which contains the application data. For example, on the Internet, packets will include in a header a source address to identify the computer sending the packet, and a destination address to identify the computer destined to receive the packet. These addresses are used by devices within the network (*e.g.*, routers) to route packets from the source computer to the destination computer. Packets will also carry in a header a source port number and a destination port number. These numbers are used to identify the application on the source computer that generated the packet and the application on the destination computer that should receive the packet, as well as how the packet should be processed. For instance, by design of the

H.323 and SIP protocols, communication sessions employing these protocols utilize multiple network port numbers to coordinate and carry out real-time, two-way multimedia communication (*e.g.*, exchanging voice, video, and control data using separate port numbers). When a packet arrives at its intended destination, the endpoint device and/or application running on the endpoint device, based in part on the destination port number carried in the packet's header, determines what data is contained in the packet's payload (*e.g.*, based on whether the port number is associated with voice, video, or control data) and processes it accordingly (*e.g.*, outputting the voice data through a speaker, displaying the video data on a display screen, or adjusting call settings).

17. When the H.323 and SIP protocols were first developed, multimedia communication was still in its infancy and the archetypical use case was intra-office videoconferencing, in which both endpoint devices existed on the same network and network traffic flowed freely between endpoints (*i.e.*, peer-to-peer conferencing that did not encounter network security devices such as firewalls and/or access-controlled routers). In that context, the use of multiple ports for carrying out multimedia communication was not particularly problematic, because data packets could be freely routed within the network. However, as broadband connectivity became more prevalent, the desire to conduct multimedia communication sessions across disparate, geographically distant networks grew. The use of multiple ports in such situations, however, was practically infeasible. Network security devices and/or network configurations intended to secure each location would often prevent critical multimedia communication packets from reaching their intended destination. As a result, attempts at communicating across networks resulted in communication sessions that suffered from poor quality or would fail altogether (*e.g.*, users would commonly experience dropped calls, one-way audio, lag, *etc.*).

18. Network firewalls, in particular, presented a significant barrier to inter-network communications. A firewall is typically used to prevent unwanted or malicious traffic from entering (or leaving) a computer network or system. One technique a firewall may use to provide security is packet filtering, wherein the firewall determines whether or not to allow individual packets to pass through the firewall by analyzing information in the packet's header (*e.g.*, allowing or denying entry based on the destination port number specified in the packet). When heightened security is desired, network security administrators may employ a restrictive policy "closing off" access to all but a select few ports, which are associated with a desired service or application. A firewall, for example, may be configured to only "open" port 80, which is the standard port for Hypertext Transport Protocol ("HTTP") traffic (*e.g.*, world-wide web traffic), and port 443, which is the standard port for Secure HTTP ("HTTPS") traffic (*e.g.*, encrypted world-wide web traffic).

19. More generally, the Internet Assigned Numbers Authority ("IANA") maintains a registry of port numbers and the application or service that is associated with each number. The registry maintained by IANA is subdivided into three ranges – the "well-known" or "system" ports, ranging from 0 through 1023; the "registered" or "user" ports, ranging from 1024 through 49,151; and, the "dynamic" or "private" ports, ranging from 49,152 through 65,535. Port numbers in the well-known and registered port number ranges are available for assignment to applications through IANA following a review and approval process. In contrast, ports numbers in the dynamic range are not assigned and are free for any application to use. While firewalls can be configured to allow traffic on any port, they typically will only permit traffic over well-known or registered ports to enter a network. Because multimedia communication protocols like SIP and H.323 make use of

both registered and dynamic ports, firewalls invariably block some or all of the data packets sent between endpoint devices in an H.323 or SIP communication session, effectively preventing communication between the endpoint devices.

20. Prior to the inventions claimed in the Patents-in-Suit, firewalls would need to be specially configured, or bypassed entirely, in order to allow for H.323 or SIP data packets associated with a multimedia communication session to enter a network (*i.e.*, to “traverse” the firewall). A security administrator, for example, could reconfigure a firewall to “open” specific ports required for a videoconference. However, manipulating the firewall in this way was a manual and time-consuming task. As such, human error or poor operational practices in this process introduced the risk of misconfiguring the firewall and thereby leaving the network vulnerable to attack. For example, after the videoconference ended, the newly “opened” ports would ideally be “closed” by the security administrator, but, in practice, these ports would remain open because security administrators often did not expend the additional time and effort required to close the ports. Consequently, the network would be vulnerable to malicious traffic entering through the “opened” ports long after the communication session had ended. Manual firewall manipulation was also practically infeasible given the dynamic nature of such multimedia communication sessions. For example, additional audio or video channels were commonly initialized in the middle of a videoconference call (*e.g.*, as a presentation begins), and supplemental services (*e.g.*, camera control) could be added at any time. Security administrators were unable to handle these unanticipated events and “open” the requisite ports on the fly. The only alternative available to security administrators was to allow endpoint communication devices to bypass the firewall entirely. But the endpoint communication devices could be compromised, allowing an outside attacker direct access to the network.

21. Furthermore, while protocols like H.323 and SIP were intended to standardize communication between different endpoint devices, in reality, this was far from the case. In practice, different endpoint devices and/or applications (*e.g.*, from different manufacturers) would each implement its own variant of H.323 and/or SIP. Unless each endpoint device implemented H.323 and/or SIP in the same way, they would be incompatible with one another and incapable of carrying on a multimedia communication session. Prior to the inventions claimed in the Patents-in-Suit, time-consuming manual intervention was required to resolve such obstacles. Otherwise, only networks that deployed compatible products (*i.e.*, endpoint devices from a common manufacturer) could effectively communicate with one another.

22. The inventions claimed in the Patents-in-Suit represent a significant improvement in the way videoconferences are conducted over the Internet. Unlike prior solutions, the inventions claimed in the Patents-in-Suit facilitate multimedia communication without requiring extensive manipulation and/or bypassing of network firewalls and, thereby, without sacrificing security. Specifically, the inventions claimed in the Patents-in-Suit convert the multi-port communication protocols typically used for videoconferencing (*e.g.*, H.323 or SIP) into a single-port protocol. By converting multi-port protocol traffic into a single-port protocol, the inventions claimed in the Patents-in-Suit more efficiently transmit data across the Internet and allow for the traversal of network firewalls over a single port, avoiding the need for complex, time consuming, and risky firewall manipulation. The inventions claimed in the Patents-in-Suit also improve system interoperability by allowing for effective communication between devices implementing different variants of H.323 and/or SIP.

23. directPacket practices one or more of the inventions claimed in each of the Patents-in-Suit. For example, directPacket sells its “Secure Internet Protocol Communications Platform” (“IPC Platform”) that incorporates its proprietary Secure Traversal and Navigation Solution (“STNS”) firewall traversal technology. directPacket’s proprietary STNS firewall traversal technology facilitates secure and efficient connections between voice and video endpoints residing on disparate firewalled networks according to one or more of the inventions claimed in each of the Patents-in-Suit. directPacket has offered products incorporating its proprietary STNS firewall traversal technology since at least 2007 and has displayed the statutory patent notice for its issued patents on these products since at least 2010. Specifically, directPacket’s IPC Platform – including its IPC-Controller, IPC-Router and IPC-Secure Endpoint Manager – have displayed the statutory patent notice for the ’978 Patent and the ’588 Patent since at least as early as their issuance in 2010, and for the ’828 Patent since at least as early as its issuance in 2013.

Polycom’s Theft of directPacket’s Proprietary Technology

24. Polycom has been aware of directPacket since at least December 2009, when Stuart Phillips, Polycom’s Senior Product Manager for Network and Security Solutions Strategy, contacted directPacket for the purpose of pursuing a potential business relationship between the companies. Throughout 2010, Polycom and directPacket undertook steps to further a business relationship. For example, in January 2010, directPacket engineers traveled to Polycom’s Westminster, Colorado facility to demonstrate directPacket’s proprietary STNS firewall traversal technology to Kevin Pitts, Polycom’s Senior Product Manager, and other Polycom employees. Upon information and belief, in March 2010, Stuart Phillips gave an internal presentation to Polycom engineers and product managers regarding directPacket’s proprietary STNS firewall traversal technology. Thereafter, directPacket and Polycom discussed formalizing a business

relationship by having directPacket enroll in Polycom's partner program that was branded by Polycom as its "ARENA Program." In May 2010, directPacket signed Polycom's ARENA Program Agreement which contained clauses limiting the use and disclosure by Polycom of directPacket's confidential information. Then, in July 2010, Stuart Phillips presented directPacket's proprietary STNS firewall traversal technology to his senior management team.

25. Shortly after that July 2010 presentation, Polycom invited directPacket to provide an in-depth technical demonstration of its proprietary STNS firewall traversal technology to Polycom engineers. In August 2010, directPacket engineers, including two of the inventors of the Patents-in-Suit, Mr. Christopher Signaoff and Mr. Justin Signaoff, provided a confidential demonstration of directPacket's proprietary STNS firewall traversal technology to Polycom engineers at Polycom's Westminster, Colorado facility, during which Polycom engineers questioned directPacket engineers, including the two inventors of the Patents-in-Suit in attendance, on the technical details of directPacket's proprietary STNS firewall traversal technology. At the time of this demonstration, the '978 Patent and '588 Patent had issued, and the patent application that resulted in the '828 Patent had been published. The equipment used by directPacket for this demonstration was marked with appropriate notices regarding the pending and/or issued patents covering those products. Numerous employees of Polycom attended and actively participated in this meeting.

26. Upon information and belief, as a result of the August 2010 demonstration, Polycom became interested in purchasing directPacket and/or its proprietary STNS firewall traversal technology. In September 2010, directPacket engaged in discussions with Dean Schoen, Polycom's Vice President of Business Development for its Video Solutions Group, and Joe Burton, Polycom's Chief Strategy Officer and Chief Technology Officer, regarding the possible

purchase of directPacket's technology or the purchase of directPacket itself by Polycom. As part of these discussions, Polycom and directPacket entered into a Mutual Non-Disclosure Agreement under which Polycom agreed that it would not disclose or otherwise use directPacket's confidential information. Upon information and belief, in December 2010, Joe Burton represented to directPacket that Polycom was interested in purchasing directPacket. He indicated that a purchase price in the \$9,000,000.00 range would be feasible. In January 2011, directPacket principals traveled to Polycom's offices in Pleasanton, California to meet with Joe Burton, Dean Schoen, Mike Kourey, Polycom's Chief Financial Officer, and Sudhakar Ramakrishna, Polycom's Chief Development Officer and Senior Vice President and General Manager of Products, to further discuss the potential purchase of directPacket by Polycom. At that meeting, directPacket discussed its proprietary STNS firewall traversal technology and the patents and pending patent applications it owned covering that technology, including the Patents-in-Suit. At the end of the January 2011 meeting, Polycom made a low-ball offer to purchase directPacket for approximately \$2,000,000.00. directPacket rejected Polycom's offer because it significantly undervalued directPacket's proprietary technology, including the inventions claimed in the Patents-in-Suit.

27. Upon information and belief, with knowledge of the Patents-in-Suit, including an in-depth technical demonstration of how directPacket's products work, beginning in April 2011 Polycom was able to offer a significantly improved version of its Video Border Proxy product that seemed to offer new functionalities substantially similar to the functionalities provided by one or more of the inventions claimed in each of the Patents-in-Suit.

28. Although directPacket was concerned about Polycom's introduction of a new version of its Video Border Proxy product so soon after Polycom's intensive efforts to learn about directPacket's inventions claimed in the Patents-in-Suit, directPacket assumed that Polycom must

have developed distinct improvements to its Video Border Proxy product on its own. Over time, directPacket's concerns, however, increased. Then in late-2015 and continuing into 2016, in a series of meetings between Polycom and directPacket, it became clear to directPacket that Polycom was, in fact, infringing at least one or more of the claims of each of the Patents-in-Suit. In particular, a Polycom employee, Sean O'Connor, admitted as much to directPacket and, at a meeting in directPacket's offices, asked one of directPacket's principals, Mr. Edward M. Riley III, whether directPacket intended to sue Polycom for patent infringement. Thereafter, directPacket initiated an investigation of Polycom's videoconferencing products and concluded that Polycom had infringed and continues to infringe at least one or more of the claims of each of the Patents-in-Suit.

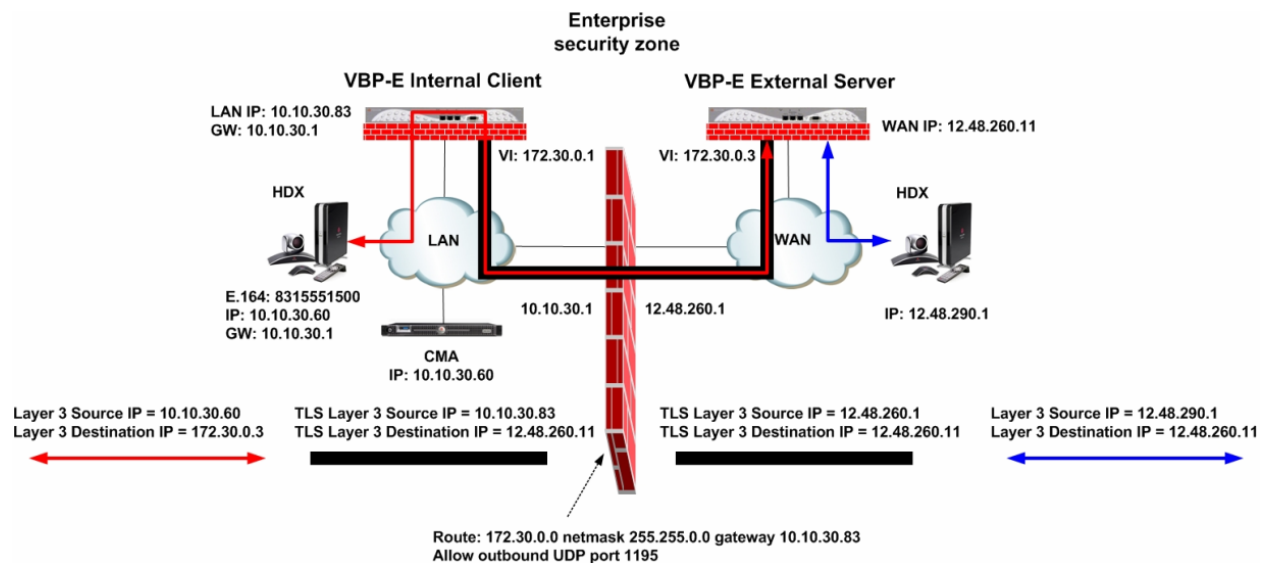
29. Upon information and belief, Polycom makes, uses, offers for sale, sells and/or imports at least two products in the United States and in this District in a manner that infringes at least one or more of the claims of each of the Patents-in-Suit. These products are Polycom's "Video Border Proxy" ("VBP") and "RealPresence Access Director" ("RPAD") products. The infringement of the Patents-in-Suit by each type of product is discussed separately below.

Infringement through Polycom's VBP Products

30. Upon information and belief, Polycom's VBP product is a firewall traversal and security solution that is used to facilitate audio and video collaboration across the Internet. Upon information and belief, Polycom has offered its VBP product for sale at least since July 2010. Upon information and belief, since at least April 2011, Polycom's VBP product has featured Polycom's Transport Layer Security firewall traversal solution ("TLS Traversal"). Upon information and belief, Polycom's current version of its VBP product is branded "VBP Plus" or "VBP 7301," and has been offered for sale since March 2015.

31. Upon information and belief, Polycom's VBP product supports the use of both H.323 and SIP protocols to conduct videoconferences over the Internet. Upon information and belief, Polycom's TLS Traversal allows Polycom's VBP product to communicate across a firewall by facilitating the transmission of multimedia data contained in H.323 and/or SIP communication sessions. Upon information and belief, when using Polycom's TLS Traversal, Polycom's VBP product converts multi-port protocol traffic (*e.g.*, H.323 or SIP traffic) into a single-port protocol (and *vice versa*). The single-port protocol is sent through the firewall over a single, commonly open port.

32. An exemplary diagram of Polycom's VBP product architecture, taken from a Polycom VBP System Configuration Guide, is reproduced below:



In the above diagram, a "VBP-E Internal Client" is located inside an enterprise firewall; a "VBP-E External Server" is located outside an enterprise firewall; and all audio and video communication between the local and remote "HDX" communication devices is sent through a secure tunnel formed between the "VBP-E Internal Client" and the "VBP-E External Server."

33. Upon information and belief, Polycom's VBP products are deployed at different organizations or at different locations within an organization (*e.g.*, at an organization's headquarters and at one or more of its satellite offices). Each VBP product allows mobile and remote users to seamlessly and securely communicate from any location using any available network access.

34. Upon information and belief, using Polycom's TLS Traversal with Polycom's VBP products, as described above, practices at least one or more of the inventions claimed in the '588 Patent. *See, e.g., supra* ¶¶ 30–33.

35. For example, upon information and belief, using Polycom's TLS Traversal with Polycom's VBP products involves receiving a multimedia data stream at a communication controller (*e.g.*, a VBP-E Internal Client) in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol and is either a text-based protocol (*e.g.*, SIP) or a binary protocol (*e.g.*, H.323). *See, e.g., supra* ¶¶ 30–33. Upon information and belief, the type of said first protocol is detected (*e.g.*, as an H.323 or SIP protocol) and the first protocol is converted into an intermediate protocol. *Id.* The intermediate protocol is then translated into a second protocol, wherein the second protocol comprises a signaling protocol and is either a binary protocol (*e.g.*, H.323) or a text-based protocol (*e.g.*, SIP). *Id.* The multimedia data stream is then transmitted to a target communication device (*e.g.*, a remote endpoint device) in said second protocol. *Id.*

36. Upon information and belief, using Polycom's TLS Traversal with Polycom's VBP products, as described above, practices at least one or more of the inventions claimed in the '978 Patent. *See, e.g., supra* ¶¶ 30–33.

37. For example, upon information and belief, using Polycom's TLS Traversal with Polycom's VBP products involves receiving, at a first intermediate communication device (*e.g.*, a VBP-E Internal Client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 "compliant" videophone or teleconferencing unit), a plurality of multiport packets of data in a multiport communication protocol for communication from the first endpoint communication device. *See, e.g., supra* ¶¶ 30–33. Upon information and belief, the first intermediate communication device converts the plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol, and transmits the single-port packets to at least a second intermediate communication device (*e.g.*, a VBP-E External Server) that is communicatively coupled with one or more other endpoint communication devices. *Id.* Upon information and belief, the first intermediate communication device transmits the single-port packets over a commonly open port, and traverses one or more firewalls using said commonly open port. *Id.* Upon information and belief, the second intermediate communication device receives and reconverts the plurality of single-port packets into the multiport communication protocol (*e.g.*, back into H.323 or SIP) resulting in reconverted plurality of multiport packets. *Id.* Upon information and belief, the second intermediate communication device, in turn, delivers the reconverted plurality of multiport packets to the one or more other endpoint communication devices using two or more ports associated with the multiport communication protocol. *Id.*

38. Upon information and belief, using Polycom's TLS Traversal with Polycom's VBP products, as described above, practices at least one or more of the inventions claimed in the '828 Patent. *See, e.g., supra* ¶¶ 30–33.

39. For example, upon information and belief, using Polycom's TLS Traversal with Polycom's VBP products at different organizations or at different locations within an organization results in a communication community, comprising one or more shared controllers (*e.g.*, a first VBP-E Internal Client), at least one individual controller (*e.g.*, a second VBP-E Internal Client), and an external controller (*e.g.*, a VBP-E External Server). *See, e.g., supra* ¶¶ 30–33.

40. Upon information and belief, the one or more shared controllers (*e.g.*, the first VBP-E Internal Client) is behind a firewall (*e.g.*, an enterprise firewall) and is connected to one or more endpoint communication devices (*e.g.*, Polycom's HDX communication device), and is operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol. *See, e.g., supra* ¶¶ 30–33.

41. Upon information and belief, the at least one individual controller (*e.g.*, the second VBP-E Internal Client) is behind another firewall (*e.g.*, a home office firewall) and is connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device), and is operable to reconvert said plurality of single-port packets into said multiport communication protocol, resulting in reconverted plurality of multiport packets. *See, e.g., supra* ¶¶ 30–33. Upon information and belief, the at least one individual controller is also operable to transmit said reconverted plurality of multiport packets to said single endpoint communication device using two or more ports associated with said multiport communication protocol. *Id.*

42. Upon information and belief, the external controller comprises a device (*e.g.*, the VBP-E External Server) that is in connection to the one or more shared controllers (*e.g.*, the first VBP-E Internal Client) and the at least one individual controller (*e.g.*, the second VBP-E Internal

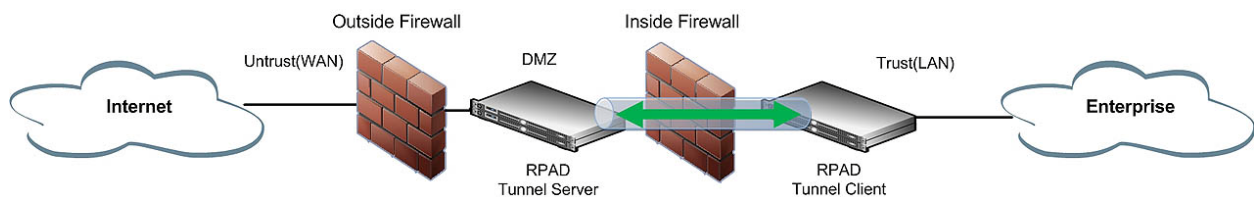
Client), is not behind said firewall or said another firewall (*e.g.*, is reachable from the public Internet), and facilitates communication between the one or more endpoint communication devices and said single endpoint communication device. *See, e.g., supra* ¶¶ 30–33.

Infringement through Polycom’s RPAD Products

43. Upon information and belief, Polycom has offered its RPAD product for sale since at least November 2012. Upon information and belief, Polycom’s RPAD product is a firewall traversal solution that securely routes communication, management, and content traffic through firewalls, allowing users to access voice, video, and multimedia communication sessions across network borders. Upon information and belief, Polycom’s RPAD product is a key component of the Polycom RealPresence Platform and is tightly integrated with other Polycom RealPresence products that monitor, manage, and control all the devices on a network, and manage and distribute calls across the network. Upon information and belief, since at least 2013, Polycom’s RPAD product has featured Polycom’s Two-System Tunnel firewall traversal solution (“Two-System Tunnel”).

44. Upon information and belief, Polycom’s RPAD product supports the use of both H.323 and SIP to conduct videoconferences over the Internet. Upon information and belief, Polycom’s Two-System Tunnel is substantially similar to the TLS Traversal functionality employed by Polycom’s VBP product discussed above. *See, e.g., supra* ¶¶ 30–42. Polycom’s Two-System Tunnel allows Polycom’s RPAD product to communicate across a firewall by facilitating the transmission of multimedia data contained in H.323 and/or SIP communication sessions. Upon information and belief, when using Polycom’s Two-System Tunnel, Polycom’s RPAD product converts multi-port protocol traffic (*e.g.*, H.323 or SIP traffic) into a single-port protocol (and *vice versa*). The single-port protocol is sent through a firewall over a single, commonly open port.

45. Upon information and belief, Polycom's Two-System Tunnel uses a first RPAD product deployed within an enterprise network (*e.g.*, an "RPAD tunnel client") and a second RPAD product deployed outside the enterprise network (*e.g.*, an "RPAD tunnel server"). An exemplary diagram of Polycom's RPAD firewall configuration, taken from a Polycom Unified Communications in Real Presence Access Director System Environments Solution Deployment Guide, is reproduced below:



46. Upon information and belief, all traffic to and from the Internet flows through the RPAD tunnel server, and all traffic to and from the enterprise network flows through the RPAD tunnel client. Upon information and belief, a communication tunnel is formed between the RPAD tunnel client and the RPAD tunnel server through the enterprise firewall (*i.e.*, the "Inside Firewall" depicted in the figure above), and all communication between the RPAD tunnel server and RPAD tunnel client traverses the enterprise firewall through the communication tunnel.

47. Upon information and belief, Polycom's RPAD products are deployed at different organizations or at different locations within an organization (*e.g.*, at an organization's headquarters and at one or more of its satellite offices). Each RPAD product allows users to connect from virtually any location and device, providing support for business-to-business and intra-company collaboration.

48. Upon information and belief, using Polycom's Two-System Tunnel with Polycom's RPAD products, as described above, practices at least one or more of the inventions claimed in the '588 Patent. *See, e.g., supra* ¶¶ 43–47.

49. For example, upon information and belief, using Polycom's Two-System Tunnel with Polycom's RPAD products involves receiving a multimedia data stream at a communication controller (*e.g.*, an RPAD tunnel client) in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol and is either a text-based protocol (*e.g.*, SIP) or a binary protocol (*e.g.*, H.323). Upon information and belief, the type of said first protocol is detected (*e.g.*, as an H.323 or SIP protocol) and the first protocol is converted into an intermediate protocol. *See, e.g., supra* ¶¶ 43–47. The intermediate protocol is then translated into a second protocol, wherein the second protocol comprises a signaling protocol and is either a binary protocol (*e.g.*, H.323) or a text-based protocol (*e.g.*, SIP). *Id.* The multimedia data stream is then transmitted to a target communication device (*e.g.*, a remote endpoint device) in said second protocol. *Id.*

50. Upon information and belief, using Polycom's Two-System Tunnel with Polycom's RPAD products, as described above, practices at least one or more of the inventions claimed in the '978 Patent. *See, e.g., supra* ¶¶ 43–47.

51. For example, upon information and belief, using Polycom's Two-System Tunnel with Polycom's RPAD products involves receiving, at a first intermediate communication device (*e.g.*, an RPAD tunnel client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), a plurality of multiport packets of data in a multiport communication protocol for communication from the first

endpoint communication device. *See, e.g., supra* ¶¶ 43–47. Upon information and belief, the first intermediate communication device converts the plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol, and transmits the single-port packets to at least a second intermediate communication device (*e.g.*, an RPAD tunnel server) that is communicatively coupled with one or more other endpoint communication devices. *Id.* Upon information and belief, the second intermediate communication device receives and reconverts the plurality of single-port packets into the multiport communication protocol (*e.g.*, back into H.323 or SIP) resulting in reconverted plurality of multiport packets. *Id.* Upon information and belief, the second intermediate communication device, in turn, delivers the reconverted plurality of multiport packets to the one or more other endpoint communication devices using two or more ports associated with the multiport communication protocol. *Id.*

52. Upon information and belief, using Polycom’s Two-System Tunnel with Polycom’s RPAD products, as described above, practices at least one or more of the inventions claimed in the ’828 Patent. *See, e.g., supra* ¶¶ 43–47.

53. For example, upon information and belief, using Polycom’s Two-System Tunnel with Polycom’s RPAD products at different organizations, or at different locations within an organization, results in a communication community, comprising one or more shared controllers (*e.g.*, a first RPAD tunnel client), at least one individual controller (*e.g.*, a second RPAD tunnel client), and an external controller (*e.g.*, an RPAD tunnel server). *See, e.g., supra* ¶¶ 43–47.

54. Upon information and belief, the one or more shared controllers (*e.g.*, the first RPAD tunnel client) is behind a firewall (*e.g.*, an enterprise firewall) and is connected to one or more endpoint communication devices (*e.g.*, Polycom’s HDX communication device), and is

operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol. *Id.*

55. Upon information and belief, the at least one individual controller (*e.g.*, the second RPAD tunnel client) is behind another firewall (*e.g.*, a home office firewall) and is connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device), and is operable to reconvert said plurality of single-port packets into said multiport communication protocol, resulting in reconverted plurality of multiport packets. *See, e.g., supra* ¶¶ 43–47. Upon information and belief, the at least one individual controller is also operable to transmit said reconverted plurality of multiport packets to said single endpoint communication device using two or more ports associated with said multiport communication protocol. *Id.*

56. Upon information and belief, the external controller comprises a device (*e.g.*, the RPAD tunnel server) that is in connection to the one or more shared controllers (*e.g.*, the first RPAD tunnel client) and the at least one individual controller (*e.g.*, the second RPAD tunnel client), is not behind said firewall or said another firewall (*e.g.*, is reachable from the public Internet), and facilitates communication between ones of said one or more endpoint communication devices and said single endpoint communication device. *See, e.g., supra* ¶¶ 43–47.

COUNT I

Polycom's Direct Infringement Of The '588 Patent

57. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–56 of this Complaint as if fully set forth herein.

58. Pursuant to 35 U.S.C. § 271(a), Polycom has directly infringed and continues to directly infringe the '588 Patent by making, using, selling, offering for sale, and/or importing into the United States products that incorporate or make use of at least one or more of the inventions claimed in the '588 Patent, including, but not limited to, systems, services, and/or software incorporating or implementing Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products. Polycom directly infringes at least one or more of the claims of the '588 Patent, including at least claim 1 of the '588 Patent.

59. Upon information and belief, Polycom uses its TLS Traversal with its VBP products to practice each and every element of at least claim 1 of the '588 Patent. For example, Polycom uses its TLS Traversal with its VBP products to practice a method for multimedia communication. *See, e.g., supra* ¶¶ 30–35. More particularly, a communication controller (*e.g.*, a VBP-E Internal Client) receives a multimedia data stream in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol. *Id.* The type of said first protocol is detected, and said first protocol is converted into an intermediate protocol. *Id.* The intermediate protocol is translated into a second protocol, wherein the second protocol comprises a signaling protocol, and said multimedia data stream is transmitted in said second protocol to a target communication device (*e.g.*, a remote endpoint device). *Id.* Furthermore, said first protocol comprises one of a text-based

protocol and a binary protocol and said second protocol comprises one of a binary protocol and a text-based protocol. *Id.*

60. Upon information and belief, Polycom uses its Two-System Tunnel with its RPAD products to practice each and every element of at least claim 1 of the '588 Patent. For example, Polycom uses its Two-System Tunnel with its RPAD products to practice a method for multimedia communication. *See, e.g., supra* ¶¶ 43–49. More particularly, a communication controller (*e.g.*, an RPAD tunnel client) receives a multimedia data stream in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol. *Id.* The type of said first protocol is detected, said first protocol is converted into an intermediate protocol. *Id.* The intermediate protocol is translated into a second protocol, wherein the second protocol comprises a signaling protocol, and said multimedia data stream is transmitted in said second protocol to a target communication device (*e.g.*, a remote endpoint device). *Id.* Furthermore, said first protocol comprises one of a text-based protocol and a binary protocol and said second protocol comprises one of a binary protocol and a text-based protocol. *Id.*

61. As a direct and proximate result of Polycom’s direct infringement of at least one or more of the claims of the '588 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

62. Unless enjoined, Polycom will continue to engage in direct infringement of at least one or more of the claims of the '588 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

63. Upon information and belief, Polycom's direct infringement of at least one or more of the claims of the '588 Patent has been, and continues to be, with full knowledge of the '588 Patent, since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

64. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '588 Patent. *See, e.g., supra* ¶¶ 24–28. Upon information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the '588 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions claimed in the '588 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '588 Patent with knowledge of their infringement since at least April 2011. *See, e.g., supra* ¶¶ 24–28.

65. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '588 Patent, including at least claim 1, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT II

Polycom's Inducement Of Infringement Of The '588 Patent

66. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–65 of this Complaint as if fully set forth herein.

67. Pursuant to 35 U.S.C. § 271(b), Polycom has indirectly infringed and continues to indirectly infringe at least one or more of the claims of the '588 Patent by actively inducing others to make, use, sell, offer for sale, and/or import into the United States Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '588 Patent.

68. Upon information and belief, Polycom makes, distributes, and/or advertises Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in this District and elsewhere in the United States, including through at least Polycom's website and authorized resellers of its products. *See, e.g., supra* ¶ 8.

69. Upon information and belief, Polycom's customers directly infringe at least one or more of the claims of the '588 Patent by using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '588 Patent.

70. Upon information and belief, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice each and every element of at least claim 1 of the '588 Patent. For example, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice a method for multimedia communication. *See, e.g., supra* ¶¶ 30–35. More particularly, a communication controller (*e.g.*, a VBP-E Internal Client) receives a multimedia data

stream in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol. *Id.* The type of said first protocol is detected, and said first protocol is converted into an intermediate protocol. *Id.* The intermediate protocol is translated into a second protocol, wherein the second protocol comprises a signaling protocol, and said multimedia data stream is transmitted in said second protocol to a target communication device (*e.g.*, a remote endpoint device). *Id.* Furthermore, said first protocol comprises one of a text-based protocol and a binary protocol and said second protocol comprises one of a binary protocol and a text-based protocol. *Id.*

71. Upon information and belief, Polycom’s customers use Polycom’s Two-System Tunnel with Polycom’s RPAD products to practice each and every element of at least claim 1 of the ’588 Patent. For example, Polycom’s customers use Polycom’s Two-System Tunnel with Polycom’s RPAD products to practice a method for multimedia communication. *See, e.g., supra* ¶¶ 43–49. More particularly, a communication controller (*e.g.*, an RPAD tunnel client) receives a multimedia data stream in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol. *Id.* The type of said first protocol is detected, and said first protocol is converted into an intermediate protocol. *Id.* The intermediate protocol is translated into a second protocol, wherein the second protocol comprises a signaling protocol, and said multimedia data stream is transmitted in said second protocol to a target communication device (*e.g.*, a remote endpoint device). *Id.* Furthermore, said first protocol comprises one of a text-based protocol and a binary protocol and said second protocol comprises one of a binary protocol and a text-based protocol. *Id.*

72. Upon information and belief, Polycom has had knowledge of the '588 Patent since at least as early as August 10, 2010, and has had knowledge of the infringement of at least one or more of the claims of the '588 Patent since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

73. Upon information and belief, Polycom has provided, and continues to provide, its customers with products having firewall traversal functionality – Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products – knowing and specifically intending for its products to be used in a manner that infringes at least one or more of the claims of the '588 Patent.

74. Upon information and belief, through its marketing activities, instructions and directions, and through the sales and offers for sale of Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products, Polycom, with knowledge of the '588 Patent and its infringement, has specifically intended for and/or specifically encouraged and instructed its customers to use, and continues to intend for and/or specifically encourage and instruct its customers to use, Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '588 Patent.

75. Upon information and belief, with knowledge of the '588 Patent and its infringement, Polycom has provided, and continues to provide, support for installing and using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '588 Patent.

76. Upon information and belief, with knowledge of the '588 Patent and its infringement, Polycom has specifically encouraged, and continues to specifically encourage, customers to infringe the '588 Patent by providing sales and technical support documentation (*e.g.*, in the form of product brochures, data sheets, administrator guides, deployment guides, system configuration guides, *etc.*) that not only instructs customers on how to use Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '588 Patent, but also promotes users to do so. Moreover, upon information and belief, Polycom has actively assisted and directed, and continues to actively assist and direct, users in deploying Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '588 Patent.

77. As a direct and proximate result of Polycom's inducement of direct infringement of at least one or more of the claims of the '588 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

78. Unless enjoined, Polycom will continue to engage in the inducement of direct infringement of at least one or more of the claims of the '588 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

79. Upon information and belief, Polycom's inducement of direct infringement of at least one or more of the claims of the '588 Patent has been, and continues to be, with full knowledge of the '588 Patent, since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

80. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '588 Patent. *See, e.g., supra* ¶¶ 24–28. Upon information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the '588 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions claimed in the '588 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '588 Patent with knowledge of their infringement since at least April 2011. *See, e.g., supra* ¶¶ 24–28.

81. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '588 Patent, including at least claim 1, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT III

Polycom's Contributory Infringement Of The '588 Patent

82. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–81 of this Complaint as if fully set forth herein.

83. Pursuant to 35 U.S.C. § 271(c), Polycom has indirectly infringed and continues to indirectly infringe at least one or more of the claims of the '588 Patent by contributing to the direct infringement by its customers of at least one or more of the claims of the '588 Patent by selling or

offering to sell to its customers a material or apparatus – Polycom’s TLS Traversal with its VBP products and/or Polycom’s Two-System Tunnel with its RPAD products – for use in practicing at least one or more of the inventions claimed in the ’588 Patent.

84. Upon information and belief, Polycom makes, distributes, and/or advertises Polycom’s TLS Traversal with its VBP products and/or Polycom’s Two-System Tunnel with its RPAD products in this District and elsewhere in the United States, including through at least Polycom’s website and authorized resellers of its products. *See, e.g., supra* ¶ 8.

85. Upon information and belief, Polycom’s customers directly infringe at least one or more of the claims of the ’588 Patent by using Polycom’s TLS Traversal with its VBP products and/or Polycom’s Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the ’588 Patent.

86. Upon information and belief, Polycom’s customers use Polycom’s TLS Traversal with Polycom’s VBP products to practice each and every element of at least claim 1 of the ’588 Patent. For example, Polycom’s customers use Polycom’s TLS Traversal with Polycom’s VBP products to practice a method for multimedia communication. *See, e.g., supra* ¶¶ 30–35. More particularly, a communication controller (*e.g.*, a VBP-E Internal Client) receives a multimedia data stream in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol. *Id.* The type of said first protocol is detected, and said first protocol is converted into an intermediate protocol. *Id.* The intermediate protocol is translated into a second protocol, wherein the second protocol comprises a signaling protocol, and said multimedia data stream is transmitted

in said second protocol to a target communication device (*e.g.*, a remote endpoint device). *Id.* Furthermore, said first protocol comprises one of a text-based protocol and a binary protocol and said second protocol comprises one of a binary protocol and a text-based protocol. *Id.*

87. Upon information and belief, Polycom’s customers use Polycom’s Two-System Tunnel with Polycom’s RPAD products to practice each and every element of at least claim 1 of the ’588 Patent. For example, Polycom’s customers use Polycom’s Two-System Tunnel with Polycom’s RPAD products to practice a method for multimedia communication. *See, e.g., supra* ¶¶ 43–49. More particularly, a communication controller (*e.g.*, an RPAD tunnel client) receives a multimedia data stream in a first protocol from a communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit), wherein the first protocol comprises a signaling protocol. *Id.* The type of said first protocol is detected, and said first protocol is converted into an intermediate protocol. *Id.* The intermediate protocol is translated into a second protocol, wherein the second protocol comprises a signaling protocol, and said multimedia data stream is transmitted in said second protocol to a target communication device (*e.g.*, a remote endpoint device). *Id.* Furthermore, said first protocol comprises one of a text-based protocol and a binary protocol and said second protocol comprises one of a binary protocol and a text-based protocol. *Id.*

88. Upon information and belief, Polycom has had knowledge of the ’588 Patent since at least as early as August 10, 2010, and has had knowledge of the infringement of at least one or more of the claims of the ’588 Patent since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

89. Upon information and belief, Polycom's TLS Traversal used with its VBP products and/or Polycom's Two-System Tunnel used with its RPAD products constitute a material component of, or are material in practicing, at least one or more of the inventions claimed in the '588 Patent. *See, e.g., supra* ¶¶ 30–35; and ¶¶ 43–49.

90. Upon information and belief, Polycom has had knowledge, and continues to have knowledge, that Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products are especially made or adapted for use in an infringement of at least one or more of the claims of the '588 Patent, and are not a staple article or commodity of commerce suitable for substantial non-infringing use.

91. As a direct and proximate result of Polycom's contributory infringement of at least one or more of the claims of the '588 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

92. Unless enjoined, Polycom will continue to engage in contributory infringement of at least one or more of the claims of the '588 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

93. Upon information and belief, Polycom's contributory infringement of at least one or more of the claims of the '588 Patent has been, and continues to be, with full knowledge of the '588 Patent, since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

94. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '588 Patent. *See, e.g., supra* ¶¶ 24–28. Upon

information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the '588 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions claimed in the '588 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '588 Patent with knowledge of their infringement since at least April 2011. *See, e.g., supra* ¶¶ 24–28.

95. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '588 Patent, including at least claim 1, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT IV

Polycom's Direct Infringement Of The '978 Patent

96. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–95 of this Complaint as if fully set forth herein.

97. Pursuant to 35 U.S.C. § 271(a), Polycom has directly infringed and continues to directly infringe the '978 Patent by making, using, selling, offering for sale, and/or importing into the United States products that incorporate or make use of at least one or more of the inventions claimed in the '978 Patent, including, but not limited to, systems, services, and/or software incorporating or implementing Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products. Polycom directly infringes one or more of the claims of the '978 Patent, including at least claim 1 of the '978 Patent.

98. Upon information and belief, Polycom uses its TLS Traversal with its VBP products to practice each and every element of at least claim 1 of the '978 Patent. For example, Polycom uses its TLS Traversal with its VBP products to practice a method for communication between two or more endpoints. *See, e.g., supra* ¶¶ 30–33, 36–37. More particularly, a first intermediate communication device (*e.g.*, a VBP-E Internal Client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit) receives a plurality of multiport packets of data in a multiport communication protocol for communication from the first endpoint communication device. *Id.* The first intermediate communication device then converts said plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol. *Id.* The first intermediate communication device transmits said plurality of single-port packets over a commonly open port from the first intermediate communication device to a second intermediate communication device (*e.g.*, a VBP-E External Server) that is communicatively coupled with one or more other endpoint communication devices, with said plurality of single-port packets traversing one or more firewalls using said commonly open port. *Id.* The second intermediate communication device receives said plurality of single-port packets, and reconverts said received plurality of single-port packets into said multiport communication protocol resulting in reconverted plurality of multiport packets. *Id.* The second intermediate communication device delivers said reconverted plurality of multiport packets to said one or more other endpoint communication devices using two or more ports associated with said multiport communication protocol. *Id.*

99. Upon information and belief, Polycom uses its Two-System Tunnel with its RPAD products to practice each and every element of at least claim 1 of the '978 Patent. For example, Polycom uses its Two-System Tunnel with its RPAD products to practice a method for communication between two or more endpoints. *See, e.g., supra* ¶¶ 43–47, 50–51. More particularly, a first intermediate communication device (*e.g.*, an RPAD tunnel client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit) receives a plurality of multiport packets of data in a multiport communication protocol for communication from the first endpoint communication device. *Id.* The first intermediate communication device then converts said plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol. *Id.* The first intermediate communication device transmits said plurality of single-port packets over a commonly open port from the first intermediate communication device to a second intermediate communication device (*e.g.*, an RPAD tunnel Server) that is communicatively coupled with one or more other endpoint communication devices, with said plurality of single-port packets traversing one or more firewalls using said commonly open port. *Id.* The second intermediate communication device receives said plurality of single-port packets, and reconverts said received plurality of single-port packets into said multiport communication protocol resulting in reconverted plurality of multiport packets. *Id.* The second intermediate communication device delivers said reconverted plurality of multiport packets to said one or more other endpoint communication devices using two or more ports associated with said multiport communication protocol. *Id.*

100. As a direct and proximate result of Polycom's direct infringement of at least one or more of the claims of the '978 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

101. Unless enjoined, Polycom will continue to engage in direct infringement of at least one or more of the claims of the '978 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

102. Upon information and belief, Polycom's direct infringement of at least one or more of the claims of the '978 Patent has been, and continues to be, with full knowledge of the '978 Patent, since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

103. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '978 Patent. *See, e.g., supra* ¶¶ 24–28. Upon information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the '978 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions claimed in the '978 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '978 Patent with knowledge of their infringement since at least April 2011. *See, e.g., supra* ¶¶ 24–28.

104. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '978 Patent, including at least claim 1, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT V

Polycom's Inducement Of Infringement Of The '978 Patent

105. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–104 of this Complaint as if fully set forth herein.

106. Pursuant to 35 U.S.C. § 271(b), Polycom has indirectly infringed and continues to indirectly infringe at least one or more of the claims of the '978 Patent by actively inducing others to make, use, sell, offer for sale, and/or import into the United States Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '978 Patent.

107. Upon information and belief, Polycom makes, distributes, and/or advertises Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in this District and elsewhere in the United States, including through at least Polycom's website and authorized resellers of its products. *See, e.g., supra* ¶ 8.

108. Upon information and belief, Polycom's customers directly infringe at least one or more of the claims of the '978 Patent by using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '978 Patent.

109. Upon information and belief, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice each and every element of at least claim 1 of the '978 Patent. For example, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice a method for communication between two or more endpoints. *See, e.g., supra* ¶¶ 30–33, 36–37. More particularly, a first intermediate communication device (*e.g.*, a VBP-E Internal Client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit) receives a plurality of multiport packets of data in a multiport communication protocol for communication from the first endpoint communication device. *Id.* The first intermediate communication device then converts said plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol. *Id.* The first intermediate communication device transmits said plurality of single-port packets over a commonly open port from the first intermediate communication device to a second intermediate communication device (*e.g.*, a VBP-E External Server) that is communicatively coupled with one or more other endpoint communication devices, with said plurality of single-port packets traversing one or more firewalls using said commonly open port. *Id.* The second intermediate communication device receives said plurality of single-port packets, and reconverts said received plurality of single-port packets into said multiport communication protocol resulting in reconverted plurality of multiport packets. *Id.* The second intermediate communication device delivers said reconverted plurality of multiport packets to said one or more other endpoint communication devices using two or more ports associated with said multiport communication protocol. *Id.*

110. Upon information and belief, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products to practice each and every element of at least claim 1 of the '978 Patent. For example, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products to practice a method for communication between two or more endpoints. *See, e.g., supra* ¶¶ 43–47, 50–51. More particularly, a first intermediate communication device (*e.g.*, an RPAD tunnel client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit) receives a plurality of multiport packets of data in a multiport communication protocol for communication from the first endpoint communication device. *Id.* The first intermediate communication device then converts said plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol. *Id.* The first intermediate communication device transmits said plurality of single-port packets over a commonly open port from the first intermediate communication device to a second intermediate communication device (*e.g.*, an RPAD tunnel server) that is communicatively coupled with one or more other endpoint communication devices, with said plurality of single-port packets traversing one or more firewalls using said commonly open port. *Id.* The second intermediate communication device receives said plurality of single-port packets, and reconverts said received plurality of single-port packets into said multiport communication protocol resulting in reconverted plurality of multiport packets. *Id.* The second intermediate communication device delivers said reconverted plurality of multiport packets to said one or more other endpoint communication devices using two or more ports associated with said multiport communication protocol. *Id.*

111. Upon information and belief, Polycom has had knowledge of the '978 Patent since at least as early as May 4, 2010, and has had knowledge of the infringement of at least one or more of the claims of the '978 Patent since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

112. Upon information and belief, Polycom has provided, and continues to provide, its customers with products having firewall traversal functionality – Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products – knowing and specifically intending for its products to be used in a manner that infringes at least one or more of the claims of the '978 Patent.

113. Upon information and belief, through its marketing activities, instructions and directions, and through the sales and offers for sale of Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products, Polycom, with knowledge of the '978 Patent and its infringement, has specifically intended for and/or specifically encouraged and instructed its customers to use, and continues to intend for and/or specifically encourage and instruct its customers to use, Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '978 Patent.

114. Upon information and belief, with knowledge of the '978 Patent and its infringement, Polycom has provided, and continues to provide, support for installing and using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '978 Patent.

115. Upon information and belief, with knowledge of the '978 Patent and its infringement, Polycom has specifically encouraged, and continues to specifically encourage, customers to infringe the '978 Patent by providing sales and technical support documentation (*e.g.*, in the form of product brochures, data sheets, administrator guides, deployment guides, system configuration guides, *etc.*) that not only instructs customers on how to use Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '978 Patent, but also promotes users to do so. Moreover, upon information and belief, Polycom has actively assisted and directed, and continues to actively assist and direct, users in deploying Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '978 Patent.

116. As a direct and proximate result of Polycom's inducement of direct infringement of at least one or more of the claims of the '978 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

117. Unless enjoined, Polycom will continue to engage in the inducement of direct infringement of at least one or more of the claims of the '978 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

118. Upon information and belief, Polycom's inducement of direct infringement of at least one or more of the claims of the '978 Patent has been, and continues to be, with full knowledge of the '978 Patent, since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

119. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy

directPacket's proprietary technology claimed in the '978 Patent. *See, e.g., supra* ¶¶ 24–28. Upon information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the '978 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions claimed in the '978 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '978 Patent with knowledge of their infringement since at least April 2011. *See, e.g., supra* ¶¶ 24–28.

120. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '978 Patent, including at least claim 1, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT VI

Polycom's Contributory Infringement Of The '978 Patent

121. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–120 of this Complaint as if fully set forth herein.

122. Pursuant to 35 U.S.C. § 271(c), Polycom has indirectly infringed and continues to indirectly infringe at least one or more of the claims of the '978 Patent by contributing to the direct infringement by its customers of at least one or more of the claims of the '978 Patent by selling or offering to sell to its customers a material or apparatus – Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products – for use in practicing at least one or more of the inventions claimed in the '978 Patent.

123. Upon information and belief, Polycom makes, distributes, and/or advertises Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in this District and elsewhere in the United States, including through at least Polycom's website and authorized resellers of its products. *See, e.g., supra* ¶ 8.

124. Upon information and belief, Polycom's customers directly infringe at least one or more of the claims of the '978 Patent by using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '978 Patent.

125. Upon information and belief, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice each and every element of at least claim 1 of the '978 Patent. For example, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice a method for communication between two or more endpoints. *See, e.g., supra* ¶¶ 30–33, 36–37. More particularly, a first intermediate communication device (*e.g.*, a VBP-E Internal Client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit) receives a plurality of multiport packets of data in a multiport communication protocol for communication from the first endpoint communication device. *Id.* The first intermediate communication device then converts said plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol. *Id.* The first intermediate communication device transmits said plurality of single-port packets over a commonly open port from the first intermediate communication device to a second intermediate communication device (*e.g.*, a VBP-E External Server) that is communicatively coupled with one or more other endpoint communication devices, with said plurality of single-port packets traversing one or more firewalls using said commonly open port. *Id.* The second

intermediate communication device receives said plurality of single-port packets, and reconverts said received plurality of single-port packets into said multiport communication protocol resulting in reconverted plurality of multiport packets. *Id.* The second intermediate communication device delivers said reconverted plurality of multiport packets to said one or more other endpoint communication devices using two or more ports associated with said multiport communication protocol. *Id.*

126. Upon information and belief, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products to practice each and every element of at least claim 1 of the '978 Patent. For example, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products to practice a method for communication between two or more endpoints. *See, e.g., supra* ¶¶ 43–47, 50–51. More particularly, a first intermediate communication device (*e.g.*, an RPAD tunnel client) that is communicatively coupled with a first endpoint communication device (*e.g.*, a SIP or H.323 “compliant” videophone or teleconferencing unit) receives a plurality of multiport packets of data in a multiport communication protocol for communication from the first endpoint communication device. *Id.* The first intermediate communication device then converts said plurality of multiport packets into a plurality of single-port packets in a single-port communication protocol. *Id.* The first intermediate communication device transmits said plurality of single-port packets over a commonly open port from the first intermediate communication device to a second intermediate communication device (*e.g.*, an RPAD tunnel server) that is communicatively coupled with one or more other endpoint communication devices, with said plurality of single-port packets traversing one or more firewalls using said commonly open port. *Id.* The second intermediate communication device receives said plurality of single-port packets, and reconverts said received plurality of single-port packets into

said multiport communication protocol resulting in reconverted plurality of multiport packets. *Id.* The second intermediate communication device delivers said reconverted plurality of multiport packets to said one or more other endpoint communication devices using two or more ports associated with said multiport communication protocol. *Id.*

127. Upon information and belief, Polycom has had knowledge of the '978 Patent since at least as early as May 4, 2010, and has had knowledge of the infringement of at least one or more of the claims of the '978 Patent since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

128. Upon information and belief, Polycom's TLS Traversal used with its VBP products and/or Polycom's Two-System Tunnel used with its RPAD products constitute a material component of, or are material in practicing, at least one or more of the inventions claimed in the '978 Patent. *See, e.g., supra* ¶¶ 30–33, 36–37; and ¶¶ 43–47, 50–51.

129. Upon information and belief, Polycom has had knowledge, and continues to have knowledge, that Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products are especially made or adapted for use in an infringement of at least one or more of the claims of the '978 Patent, and are not a staple article or commodity of commerce suitable for substantial non-infringing use.

130. As a direct and proximate result of Polycom's contributory infringement of at least one or more of the claims of the '978 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

131. Unless enjoined, Polycom will continue to engage in contributory infringement of at least one or more of the claims of the '978 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

132. Upon information and belief, Polycom's contributory infringement of at least one or more of the claims of the '978 Patent has been, and continues to be, with full knowledge of the '978 Patent, since at least as early as April 2011. *See, e.g., supra* ¶¶ 24–28.

133. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '978 Patent. *See, e.g., supra* ¶¶ 24–28. Upon information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the '978 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions claimed in the '978 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '978 Patent with knowledge of their infringement since at least April 2011. *See, e.g., supra* ¶¶ 24–28.

134. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '978 Patent, including at least claim 1, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT VII

Polycom's Direct Infringement Of The '828 Patent

135. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–134 of this Complaint as if fully set forth herein.

136. Pursuant to 35 U.S.C. § 271(a), Polycom has directly infringed and continues to directly infringe the '828 Patent by making, using, selling, offering for sale, and/or importing into the United States products that incorporate or make use of at least one or more of the inventions claimed in the '828 Patent, including, but not limited to, systems, services, and/or software incorporating or implementing Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products. Polycom directly infringes one or more of the claims of the '828 Patent, including at least claim 11 of the '828 Patent.

137. Upon information and belief, Polycom uses its TLS Traversal with its VBP products to practice each and every element of at least claim 11 of the '828 Patent. For example, Polycom uses its TLS Traversal with its VBP products at different organizations, or at different locations within an organization, to form a communication community. More particularly, the communication community comprises one or more shared controllers (*e.g.*, a first VBP-E Internal Client) connected to one or more endpoint communication devices (*e.g.*, Polycom's HDX communication device), wherein said one or more shared controllers is behind a firewall (*e.g.*, an enterprise firewall), and wherein said one or more shared controllers is operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol, *see, e.g., supra* ¶¶ 30–33, 38–42, at least one individual controller (*e.g.*, a second VBP-E Internal Client) connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device),

wherein said at least one individual controller is behind another firewall (*e.g.*, a home office firewall), and wherein said at least one individual controller is operable to reconvert said plurality of single-port packets into said multiport communication protocol, resulting in reconverted plurality of multiport packets, and transmit to said single endpoint communication device said reconverted plurality of multiport packets using two or more ports associated with said multiport communication protocol, *id.*, and an external controller (*e.g.*, a VBP-E External Server) that comprises a device, said external controller in connection to said one or more shared controllers and said at least one individual controller, wherein said external controller is not behind said firewall or said another firewall, and wherein said external controller facilitates communication between ones of said one or more endpoint communication devices and said single endpoint communication device, *id.*

138. Upon information and belief, Polycom uses its Two-System Tunnel with its RPAD products to practice each and every element of at least claim 11 of the '828 Patent. For example, Polycom uses its Two-System Tunnel with its RPAD products at different organizations, or at different locations within an organization, to form a communication community. More particularly, the communication community comprises one or more shared controllers (*e.g.*, a first RPAD tunnel client) connected to one or more endpoint communication devices (*e.g.*, Polycom's HDX communication device), wherein said one or more shared controllers is behind a firewall (*e.g.*, an enterprise firewall), and wherein said one or more shared controllers is operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol, *see, e.g., supra ¶¶ 43–47, 52–56*, at least one individual controller (*e.g.*, a second RPAD tunnel client) connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device), wherein

said at least one individual controller is behind another firewall (*e.g.*, a home office firewall), and wherein said at least one individual controller is operable to reconvert said plurality of single-port packets into said multiport communication protocol, resulting in reconverted plurality of multiport packets, and transmit to said single endpoint communication device said reconverted plurality of multiport packets using two or more ports associated with said multiport communication protocol, *id.*, and an external controller (*e.g.*, an RPAD tunnel server) that comprises a device, said external controller in connection to said one or more shared controllers and said at least one individual controller, wherein said external controller is not behind said firewall or said another firewall, and wherein said external controller facilitates communication between ones of said one or more endpoint communication devices and said single endpoint communication device, *id.*

139. As a direct and proximate result of Polycom's direct infringement of at least one or more of the claims of the '828 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

140. Unless enjoined, Polycom will continue to engage in direct infringement of at least one or more of the claims of the '828 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

141. Upon information and belief, Polycom's direct infringement of at least one or more of the claims of the '828 Patent has been, and continues to be, with full knowledge of the '828 Patent, since at least as early as October 15, 2013. *See, e.g., supra* ¶¶ 24–28.

142. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '828 Patent. *See, e.g., supra* ¶¶ 24–28. Upon

information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the patent application that ultimately issued as the '828 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions claimed in the patent application that ultimately issued as the '828 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '828 Patent with knowledge of their infringement since at least October 15, 2013. *See, e.g., supra* ¶¶ 13, 24–28.

143. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '828 Patent, including at least claim 11, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT VIII

Polycom's Inducement Of Infringement Of The '828 Patent

144. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–143 of this Complaint as if fully set forth herein.

145. Pursuant to 35 U.S.C. § 271(b), Polycom has indirectly infringed and continues to indirectly infringe at least one or more of the claims of the '828 Patent by actively inducing others to make, use, sell, offer for sale, and/or import into the United States Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '828 Patent.

146. Upon information and belief, Polycom makes, distributes, and/or advertises Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in this District and elsewhere in the United States, including through at least Polycom's website and authorized resellers of its products. *See, e.g., supra* ¶ 8.

147. Upon information and belief, Polycom's customers directly infringe at least one or more of the claims of the '828 Patent by using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '828 Patent.

148. Upon information and belief, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice each and every element of at least claim 11 of the '828 Patent. For example, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products at different organizations, or at different locations within an organization, to form a communication community. More particularly, the communication community comprises one or more shared controllers (*e.g.*, a first VBP-E Internal Client) connected to one or more endpoint communication devices (*e.g.*, Polycom's HDX communication device), wherein said one or more shared controllers is behind a firewall (*e.g.*, an enterprise firewall), and wherein said one or more shared controllers is operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol, *see, e.g., supra* ¶¶ 30–33, 38–42, at least one individual controller (*e.g.*, a second VBP-E Internal Client) connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device), wherein said at least one individual controller is behind another firewall (*e.g.*, a home office firewall), and wherein said at least one individual controller is operable to reconvert said plurality of single-port packets into said multiport communication

protocol, resulting in reconverted plurality of multiport packets, and transmit to said single endpoint communication device said reconverted plurality of multiport packets using two or more ports associated with said multiport communication protocol, *id.*, and an external controller (*e.g.*, a VBP-E External Server) that comprises a device, said external controller in connection to said one or more shared controllers and said at least one individual controller, wherein said external controller is not behind said firewall or said another firewall, and wherein said external controller facilitates communication between ones of said one or more endpoint communication devices and said single endpoint communication device, *id.*

149. Upon information and belief, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products to practice each and every element of at least claim 11 of the '828 Patent. For example, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products at different organizations, or at different locations within an organization, to form a communication community. More particularly, the communication community comprises one or more shared controllers (*e.g.*, a first RPAD tunnel client) connected to one or more endpoint communication devices (*e.g.*, Polycom's HDX communication device), wherein said one or more shared controllers is behind a firewall (*e.g.*, an enterprise firewall), and wherein said one or more shared controllers is operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol, *see, e.g., supra* ¶¶ 43–47, 52–56, at least one individual controller (*e.g.*, a second RPAD tunnel client) connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device), wherein said at least one individual controller is behind another firewall (*e.g.*, a home office firewall), and wherein said at least one individual controller is operable to reconvert said plurality of single-port packets into

said multiport communication protocol, resulting in reconverted plurality of multiport packets, and transmit to said single endpoint communication device said reconverted plurality of multiport packets using two or more ports associated with said multiport communication protocol, *id.*, and an external controller (*e.g.*, an RPAD tunnel server) that comprises a device, said external controller in connection to said one or more shared controllers and said at least one individual controller, wherein said external controller is not behind said firewall or said another firewall, and wherein said external controller facilitates communication between ones of said one or more endpoint communication devices and said single endpoint communication device, *id.*

150. Upon information and belief, Polycom has had knowledge of the '828 Patent and the infringement of at least one or more of the claims of the '828 Patent since at least as early as October 15, 2013. *See, e.g., supra* ¶¶ 13, 24–28.

151. Upon information and belief, Polycom has provided, and continues to provide, its customers with products having firewall traversal functionality – Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products – knowing and specifically intending for its products to be used in a manner that infringes at least one or more of the claims of the '828 Patent.

152. Upon information and belief, through its marketing activities, instructions and directions, and through the sales and offers for sale of Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products, Polycom, with knowledge of the '828 Patent and its infringement, has specifically intended for and/or specifically encouraged and instructed its customers to use, and continues to intend for and/or specifically

encourage and instruct its customers to use, Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '828 Patent.

153. Upon information and belief, with knowledge of the '828 Patent and its infringement, Polycom has provided, and continues to provide, support for installing and using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '828 Patent.

154. Upon information and belief, with knowledge of the '828 Patent and its infringement, Polycom has specifically encouraged, and continues to specifically encourage, customers to infringe the '828 Patent by providing sales and technical support documentation (*e.g.*, in the form of product brochures, data sheets, administrator guides, deployment guides, system configuration guides, *etc.*) that not only instructs customers on how to use Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '828 Patent, but also promotes users to do so. Moreover, upon information and belief, Polycom has actively assisted and directed, and continues to actively assist and direct, users in deploying Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '828 Patent.

155. As a direct and proximate result of Polycom's inducement of direct infringement of at least one or more of the claims of the '828 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

156. Unless enjoined, Polycom will continue to engage in the inducement of direct infringement of at least one or more of the claims of the '828 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

157. Upon information and belief, Polycom's inducement of direct infringement of at least one or more of the claims of the '828 Patent has been, and continues to be, with full knowledge of the '828 Patent, since at least as early as October 15, 2013. *See, e.g., supra* ¶¶ 13, 24–28.

158. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '828 Patent. *See, e.g., supra* ¶¶ 24–28. Upon information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the patent application that ultimately issued as the '828 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions that were described in the patent application that ultimately issued as the '828 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '828 Patent with knowledge of their infringement since at least October 15, 2013. *See, e.g., supra* ¶¶ 13, 24–28.

159. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '828 Patent, including at least claim 11, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

COUNT IX

Polycom's Contributory Infringement Of The '828 Patent

160. directPacket repeats and realleges each and every allegation of the foregoing Paragraphs 1–159 of this Complaint as if fully set forth herein.

161. Pursuant to 35 U.S.C. § 271(c), Polycom has indirectly infringed and continues to indirectly infringe at least one or more of the claims of the '828 Patent by contributing to the direct infringement by its customers of at least one or more of the claims of the '828 Patent by selling or offering to sell to its customers a material or apparatus – Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products – for use in practicing at least one or more of the inventions claimed in the '828 Patent.

162. Upon information and belief, Polycom makes, distributes, and/or advertises Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in this District and elsewhere in the United States, including through at least Polycom's website and authorized resellers of its products. *See, e.g., supra* ¶ 8.

163. Upon information and belief, Polycom's customers directly infringe at least one or more of the claims of the '828 Patent by using Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products in a manner that infringes at least one or more of the claims of the '828 Patent.

164. Upon information and belief, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products to practice each and every element of at least claim 11 of the '828 Patent. For example, Polycom's customers use Polycom's TLS Traversal with Polycom's VBP products at different organizations, or at different locations within an organization, to form a

communication community. More particularly, the communication community comprises one or more shared controllers (*e.g.*, a first VBP-E Internal Client) connected to one or more endpoint communication devices (*e.g.*, Polycom's HDX communication device), wherein said one or more shared controllers is behind a firewall (*e.g.*, an enterprise firewall), and wherein said one or more shared controllers is operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol, *see, e.g., supra* ¶¶ 30–33, 38–42, at least one individual controller (*e.g.*, a second VBP-E Internal Client) connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device), wherein said at least one individual controller is behind another firewall (*e.g.*, a home office firewall), and wherein said at least one individual controller is operable to reconvert said plurality of single-port packets into said multiport communication protocol, resulting in reconverted plurality of multiport packets, and transmit to said single endpoint communication device said reconverted plurality of multiport packets using two or more ports associated with said multiport communication protocol, *id.*, and an external controller (*e.g.*, a VBP-E External Server) that comprises a device, said external controller in connection to said one or more shared controllers and said at least one individual controller, wherein said external controller is not behind said firewall or said another firewall, and wherein said external controller facilitates communication between ones of said one or more endpoint communication devices and said single endpoint communication device, *id.*

165. Upon information and belief, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products to practice each and every element of at least claim 11 of the '828 Patent. For example, Polycom's customers use Polycom's Two-System Tunnel with Polycom's RPAD products at different organizations, or at different locations within an

organization, to form a communication community. More particularly, the communication community comprises one or more shared controllers (*e.g.*, a first RPAD tunnel client) connected to one or more endpoint communication devices (*e.g.*, Polycom's HDX communication device), wherein said one or more shared controllers is behind a firewall (*e.g.*, an enterprise firewall), and wherein said one or more shared controllers is operable to convert a plurality of multiport packets received from said one or more endpoint communication devices into a plurality of single-port packets in a single-port communication protocol, *see, e.g., supra* ¶¶ 43–47, 52–56, at least one individual controller (*e.g.*, a second RPAD tunnel client) connected to a single endpoint communication device (*e.g.*, Polycom's HDX communication device), wherein said at least one individual controller is behind another firewall (*e.g.*, a home office firewall), and wherein said at least one individual controller is operable to reconvert said plurality of single-port packets into said multiport communication protocol, resulting in reconverted plurality of multiport packets, and transmit to said single endpoint communication device said reconverted plurality of multiport packets using two or more ports associated with said multiport communication protocol, *id.*, and an external controller (*e.g.*, an RPAD tunnel server) that comprises a device, said external controller in connection to said one or more shared controllers and said at least one individual controller, wherein said external controller is not behind said firewall or said another firewall, and wherein said external controller facilitates communication between ones of said one or more endpoint communication devices and said single endpoint communication device, *id.*

166. Upon information and belief, Polycom has had knowledge of the '828 Patent and the infringement of at least one or more of the claims of the '828 Patent since at least as early as October 15, 2013. *See, e.g., supra* ¶¶ 13, 24–28.

167. Upon information and belief, Polycom's TLS Traversal used with its VBP products and/or Polycom's Two-System Tunnel used with its RPAD products constitute a material component of, or are material in practicing, at least one or more of the inventions claimed in the '828 Patent. *See, e.g., supra* ¶¶ 30–33, 38–42; and ¶¶ 43–47, 52–56.

168. Upon information and belief, Polycom has had knowledge, and continues to have knowledge, that Polycom's TLS Traversal with its VBP products and/or Polycom's Two-System Tunnel with its RPAD products are especially made or adapted for use in an infringement of at least one or more of the claims of the '828 Patent, and are not a staple article or commodity of commerce suitable for substantial non-infringing use.

169. As a direct and proximate result of Polycom's contributory infringement of at least one or more of the claims of the '828 Patent, directPacket has suffered injury and monetary damage for which it is entitled to recover damages.

170. Unless enjoined, Polycom will continue to engage in contributory infringement of at least one or more of the claims of the '828 Patent and will cause additional irreparable injury to directPacket for which it has no adequate remedy at law.

171. Upon information and belief, Polycom's contributory infringement of at least one or more of the claims of the '828 Patent has been, and continues to be, with full knowledge of the '828 Patent, since at least as early as October 15, 2013. *See, e.g., supra* ¶¶ 13, 24–28.

172. Upon information and belief, Polycom engaged in discussions with directPacket in 2010 and 2011 as a pretext in order to obtain the information and instruction necessary to copy directPacket's proprietary technology claimed in the '828 Patent. *See, e.g., supra* ¶¶ 24–28. Upon

information and belief, Polycom misled directPacket by suggesting Polycom was interested in purchasing directPacket and/or its technology. *Id.* Upon information and belief, shortly after directPacket rejected Polycom's low-ball offer, and with knowledge of the patent application that ultimately issued as the '828 Patent, Polycom began offering a new product which practiced the firewall traversal of the inventions that were described in the patent application that ultimately issued as the '828 Patent. *See, e.g., supra* ¶ 27. Upon information and belief, Polycom has deliberately offered, and continues to offer, products that infringe the '828 Patent with knowledge of their infringement since at least October 15, 2013. *See, e.g., supra* ¶¶ 13, 24–28.

173. Polycom's knowing, willful and deliberate infringement of at least one or more of the claims of the '828 Patent, including at least claim 11, in conscious disregard of directPacket's rights, makes this case exceptional within the meaning of 35 U.S.C. § 285, and justifies treble damages pursuant to 35 U.S.C. § 284, as well as attorneys' fees pursuant to 35 U.S.C. § 285.

WHEREFORE, Plaintiff directPacket prays for judgment in its favor and against Polycom as follows:

- A. Adjudging that Polycom has directly infringed, actively induced infringement of and contributorily infringed at least one or more of the claims of the '588 Patent, the '978 Patent, and the '828 Patent, in violation of 35 U.S.C. § 271(a), (b) and (c);
- B. Issuing a permanent injunction against Polycom's continued direct and contributory infringement of at least one or more of the claims of the '588 Patent, the '978 Patent, and the '828 Patent, as well as against continued inducement of infringement of at least one or more of the claims of the '588 Patent, the '978 Patent, and the '828 Patent;

- C. Awarding to directPacket all damages caused by Polycom in an amount to be determined at trial, but not less than a reasonable royalty;
- D. Finding that Polycom's infringement was willful entitling directPacket to an award of treble damages pursuant to 35 U.S.C. § 284;
- E. Finding that Polycom's infringement constitutes an exceptional case entitling directPacket to an award of its attorneys' fees pursuant to 35 U.S.C. § 285;
- F. Awarding to directPacket pre-judgment interest at the maximum legal rate from the earliest date allowed until the date of judgment;
- G. Awarding to directPacket post-judgment interest at the maximum legal rate pursuant to 28 U.S.C. § 1961;
- H. Awarding to directPacket all costs incurred by it in connection with this lawsuit pursuant to 28 U.S.C. § 1920; and
- I. Such other and further relief as the Court may deem just.

DEMAND FOR JURY TRIAL

Plaintiff demands a trial by jury on all causes of action triable by jury.

Dated: June 21, 2018

Respectfully submitted,

/s/

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